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SPECIAL DATA COLLECTION SYSTEM (SDCS) EVENT REPORT,
PUERTO RICO REGION, 17 JUNE 1975

K. J. Hill, et al

Teledyne Geotech

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13 January 1976

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SPECIAL DATA COLLECTION SYSTEM EVENT REPORT
Puerto Rico Region, 17 June 1975

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January 1976

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SDCS EVENT REPORT NO. 57

Puerto Rico Region, 17 June 1975

This event report contains seismic data from the Special Data Collection System (SDCS), and other sources for the above event. Published epicenter information from seismic observations is:

	"P" Arrival	Origin Time	Lat.	Long.	m_b	M_s
NORSAR	05:12:00.8	05:01:06	18 N	066 W	4.6	N/A
LASA	05:09:03.6	05:01:22	18.7N	066.9W	5.2	N/A

Using SDCS stations, LASA and NORSAR, the epicenter location and magnitudes become

05:00:56.8 17.6N 066.4W 4.8 3.9

All SDCS stations were operational during this period.

Short-period signals associated with this event were recorded at all SDCS stations, LASA and NORSAR. Horizontal SP channels at all SDCS stations were rotated. Operating gains of all three SP channels at RK-ON were unknown.

Long-period signals were recorded at WH2YK, CPSO, RK-ON, ALPA, LASA and NORSAR. FN-WV and HN-ME did not record LP signals for this event and were not included in this report. Horizontal LP channels at WH2YK and RK-ON were rotated. At CPSO the calibration of the LP north instrument was invalid and rotation of the LP horizontal channels was therefore not accomplished. Validity of the ALPA, LASA and NORSAR long-period vertical beams is uncertain and the horizontal channels were not included because of program recovery problems.

Scaling factors on plots are millimicrons at 1 Hz (not corrected for instrument response) with the exception of LASA and NORSAR short-period plots. LASA SP scaling factors are millimicrons per inch. Scaling factors are not reported for NORSAR short-period.

STATION DESCRIPTION

SITE CODE	LOCATION	SITE COORDINATES		ELEVATION METERS	INSTRUMENTATION	
					SHORT-PERIOD	LONG-PERIOD
ALPA	Alaska	65 14 00.0 N 147 44 36.0 W		626	None	31300
CPSO	McMinnville, Tennessee	35 35 41.4 N 085 34 13.5 W		574	6480 V 7515 H	SL210 V SL220 H
FN-WV	Franklin, West Virginia	38 32 58.0 N 079 30 47.0 W		910	KS36000	KS36000
LASA	Billings, Montana	46 41 19.0 N 106 13 20.0 W		744	HS10	7505A V 8700C H
HN-ME	Houlton, Maine	46 09 43.0 N 067 59 09.0 W		213	18300	SL210 V SL220 H
NORSAR	Kjeller, Norway	60 49 25.4 N 010 49 55.5 E		379	HS10	7505A V 8700C H
RK-ON	Red Lake, Ontario	50 50 20.0 N 093 40 20.0 W		366	18300	SL210 V SL220 H
WH2YK	White Horse, Yukon	60 41 41.0 N 134 58 02.0 W		853	18300	SL210 V SL220 H

Note: The orientation of the radial instruments at FN-WV is assumed to be 316° + 5° based on empirical data (event recordings). Rotation, where performed, is referenced to this azimuth and may be questionable.

HYPOCENTER DETERMINATION

INPUT FOR EVENT 17 JUN 75
05:01:22.0 18.698N 66.900W OKM.

STA.	ARRIVAL	RESIDUALS		DIST.	AZ.
		CAIC	REST		
FN-WV	05 06 10.4	0.3	0.2	23.8	333.8
CPC	05 06 19.7	-0.1	0.9	24.7	320.2
HN-ME*	05 06 47.4	-4.7 *	-5.7 *	28.5	357.7
RK-ON	05 08 28.5	-0.5	-1.2	39.7	332.9
IAC	05 09 03.6	-0.0	0.2	43.8	320.4
WH2YK	05 11 32.9	0.3	-0.4	64.3	329.5
NAO	05 12 00.8	-0.0	0.4	68.6	30.9

67 HERRIN TRAVEL TIME TABLES

ORIGIN	LAT.	LCNG.	DEPTH (KM)	SDV	IT	STA
05:01:27.8	18.833N	66.557W	215. CAIC	0.3	4	6
05:00:56.8	17.597N	66.385W	0. REST	0.7	3	6

CALC				REST			
	1	.	0		1	.	0
2	.		1	2	.		1
0	2.	0	0	0	2.	0	0
.
0	0.	0	0	0	0.	0	0
0	.		0	0	.		0
0	.	0		0	.	0	

CHI2 COVERAGE ELLIPSE; 95 PER CENT CONF..LEVEL, SDV= 1.22
MAJOR 146.1KM. MINOR 43.9KM. AZ= 13 AREA= 20155 SQ.KM. REST

* HN-ME NOT USED IN HYPOCENTER DETERMINATION BECAUSE
OF POOR SIGNAL ARRIVAL TIME.

DATA SUMMARY

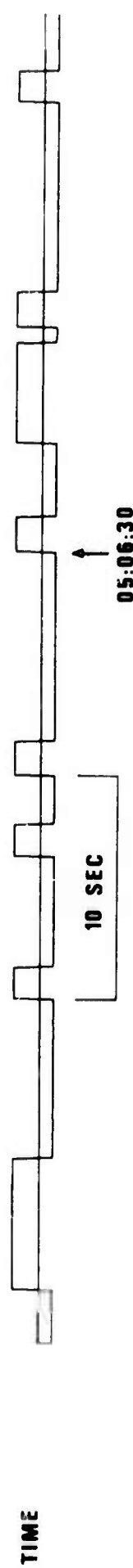
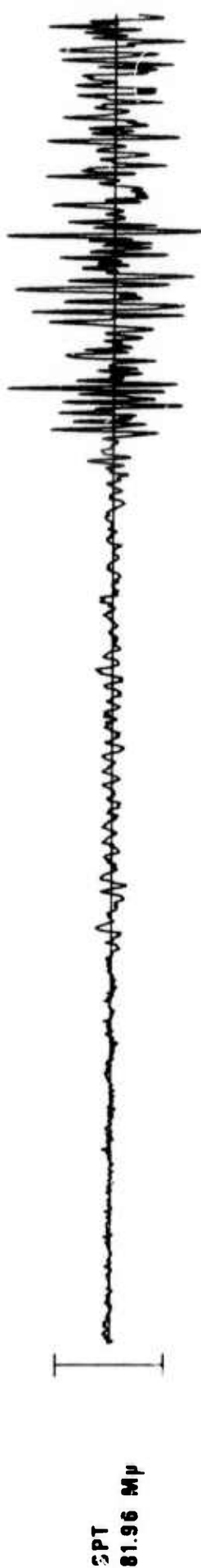
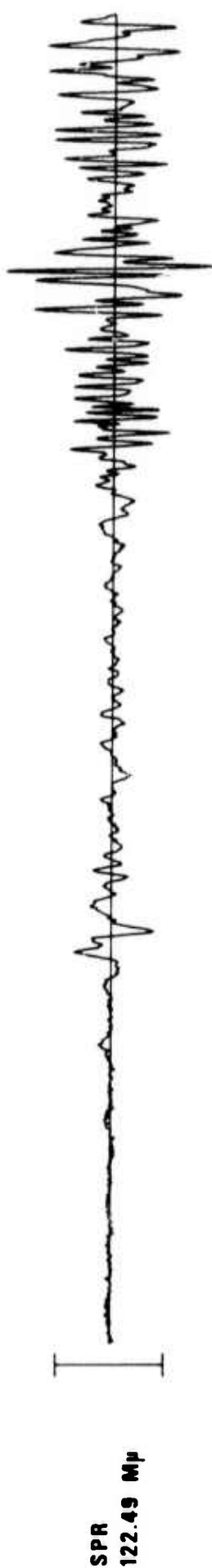
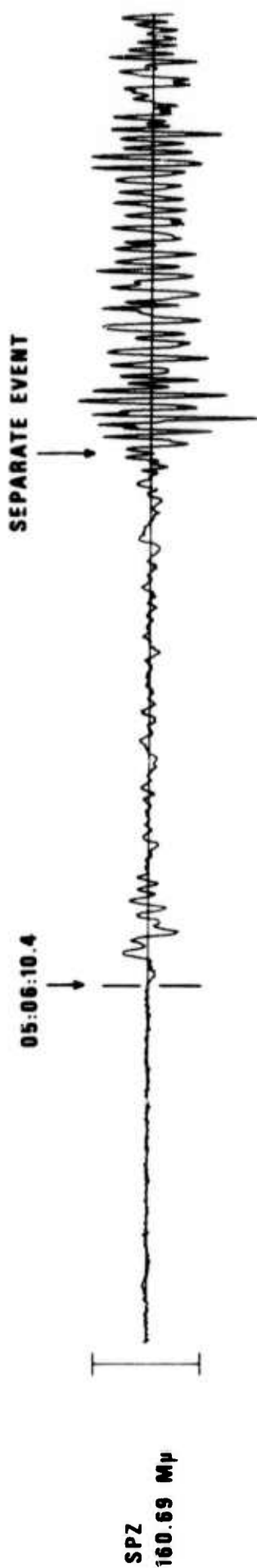
INPUT FOR EVENT 17 JUN 75
05:01:22.0 18.698N 66.900W 0KM.

STA.	PHASE	ARRIVAL		INST	PER	A/T	MAGNITUDE		DIR	DIST
		TIME					MB	MS		
FN-WV	EP	05 06	10.4	SP2	0.7	50.	4.70			23.8
CFC	EP	05 06	19.7	SP2	0.9	92.	5.11			24.7
CFC	LR	05 15	08.0	LPZ	21.0	26.		3.93		24.7
HN-ME*	EP	05 06	47.4	SP2	1.6	34.	4.03			28.5
RK-CN	EP	05 08	28.5	SP2	0.7	??				
RK-CN	LR	05 24	24.0	LPZ	20.0	43.		4.35		39.7
IAC	EP	05 09	03.6	AB	0.8	38.	4.78			43.8
LAO	LR	05 26	26.0	LPZ	21.0	15.		3.94		43.8
WH2YK	EP	05 11	32.9	SPZ	0.5	14.	4.85			64.3
WH2YK	LR	05 39	40.0	LPZ	20.0	10.		3.93		64.3
NAO	EP	05 12	00.8	AB	0.8	12.	4.78			68.6
NAO	LR	05 37	30.0	LPZ	20.0	6.		3.73		68.6
ALPA	LR	05 42	32.0	LPZ	22.0	6.		3.75		70.6

ORIGIN	LAT.	LCNG.	DEPTH (KM)	MAG	SDV	STA	LPMAG	LPSDV	LPSTA
05:01:27.8	18.833N	66.557W	215. CALC	4.58	0.31	5	3.93	0.2	6
05:00:56.8	17.597N	66.385W	0. REST	4.84	0.16	5	3.94	0.2	6

*HN-ME NOT USED IN HYPOCENTER DETERMINATION BECAUSE
OF POOR SIGNAL ARRIVAL TIME.

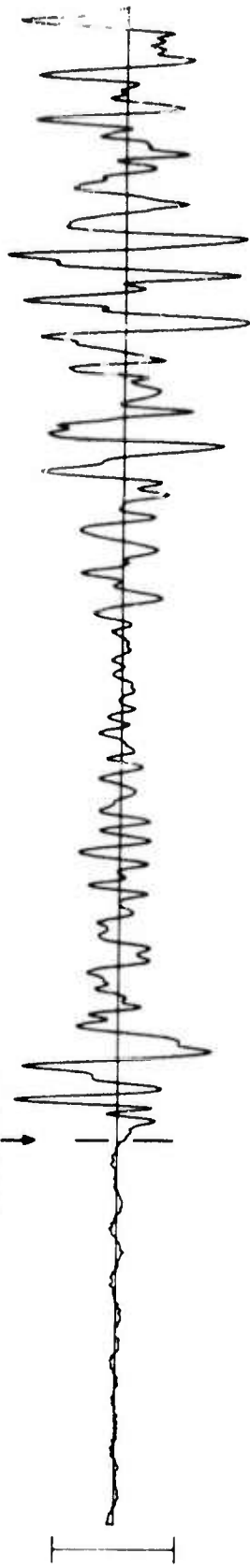
FN-WV 17 JUN 75



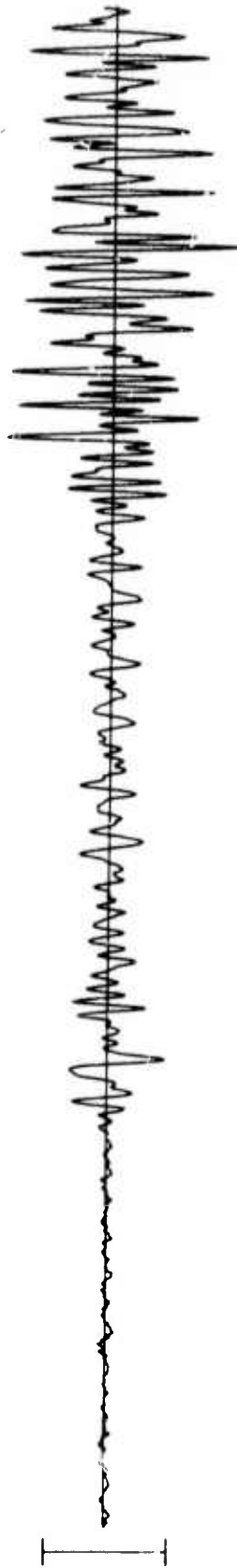
CPSO 17 JUN 75

SPZ
82.29 Mμ

05:06:19.7



SPR
34.50 Mμ



SPT
26.57 Mμ



TIME



HN-ME 17 JUN 75

SPZ
14.27 Mμ

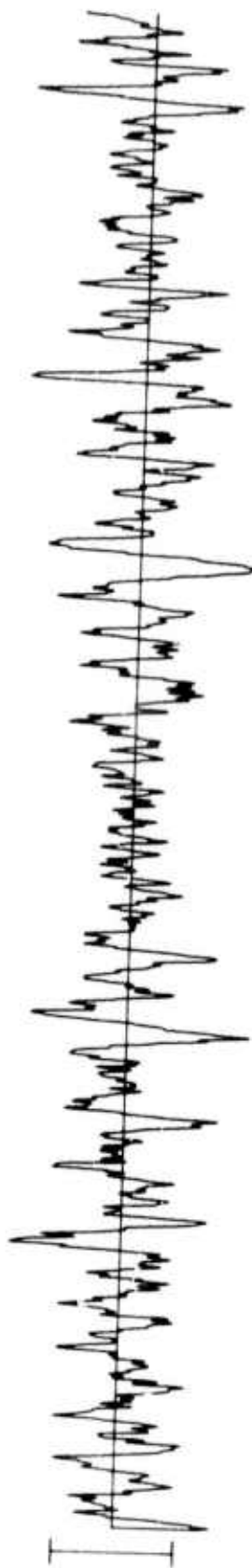
05:06:47.4



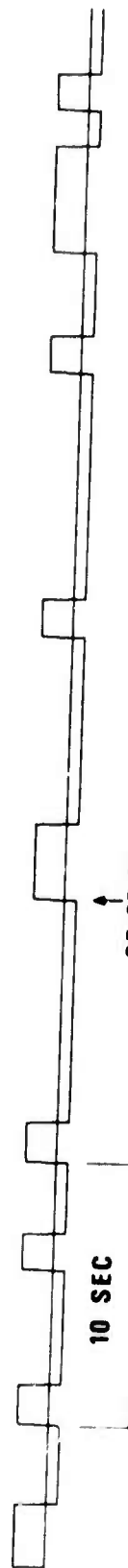
SPR
7.93 Mμ



SPT
5.04 Mμ



TIME



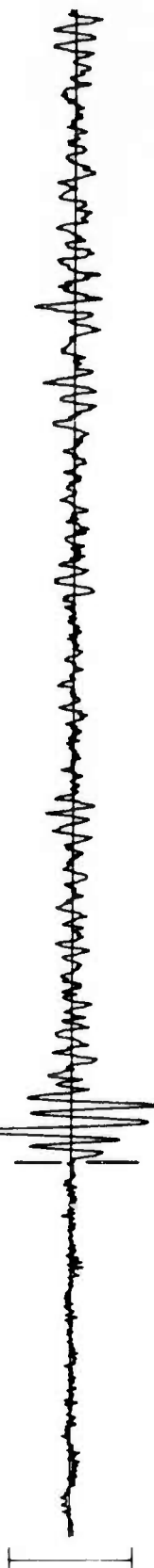
2<

RK-ON 17 JUN 75

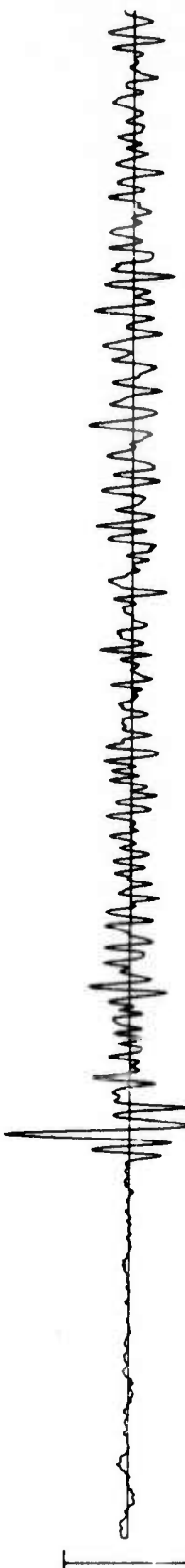
05:08:28.5



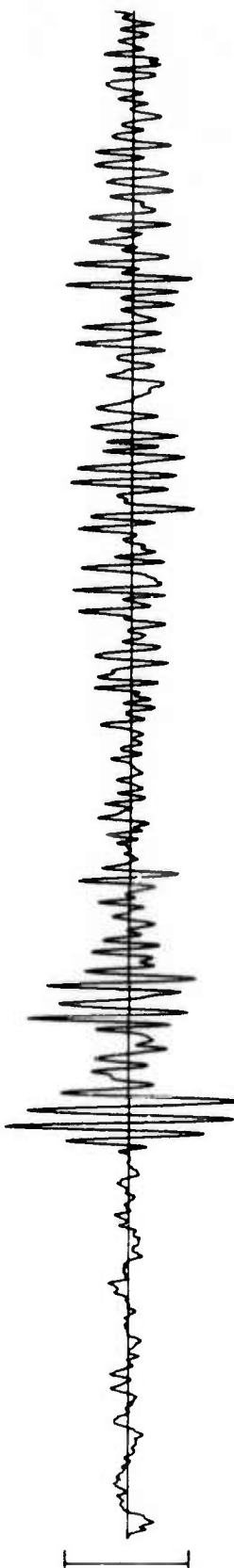
SPZ
UNKNOWN



SPR
UNKNOWN



SPT
UNKNOWN



10 SEC

• CALIBRATIONS INVALID

WH2YK 17 JUN 75

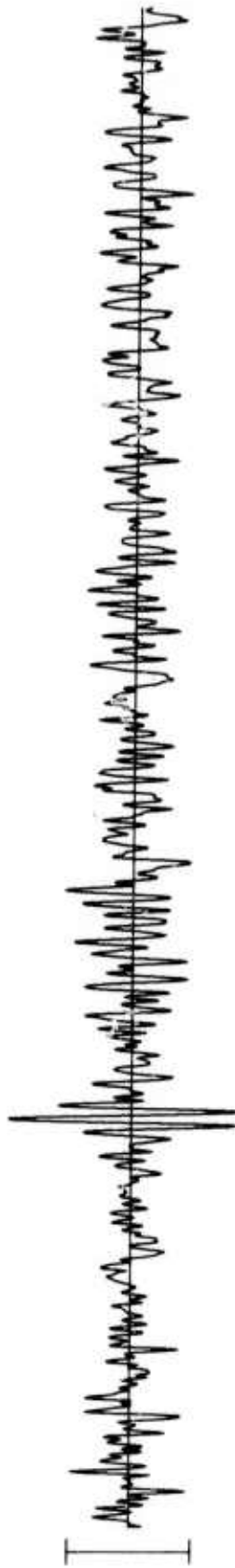
05:11:32.9



SPZ
14.30 Mμ



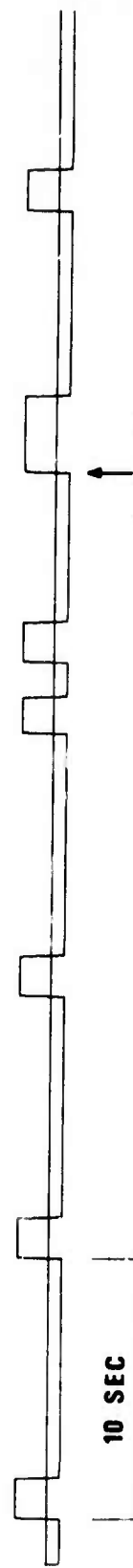
SPR
9.99 Mμ



SPT
6.18 Mμ



TIME



9<

LASA

1 17 JUN 1975

2 5 1 22 18.7N 66.9W 135G B 5.2 90 PUERTO RICO REGION

3 5 9 3.4 LAO P 69.4 1.5 13.8 42.5 117.4

EPX 57230

BP-B 0.6-2.0 HZ

ABN 7.2

05:08:53.4

AB 150

FAB 110

PAB1 100

PAB2 86

PAB3 110

PAB4 110

10 SEC

10<

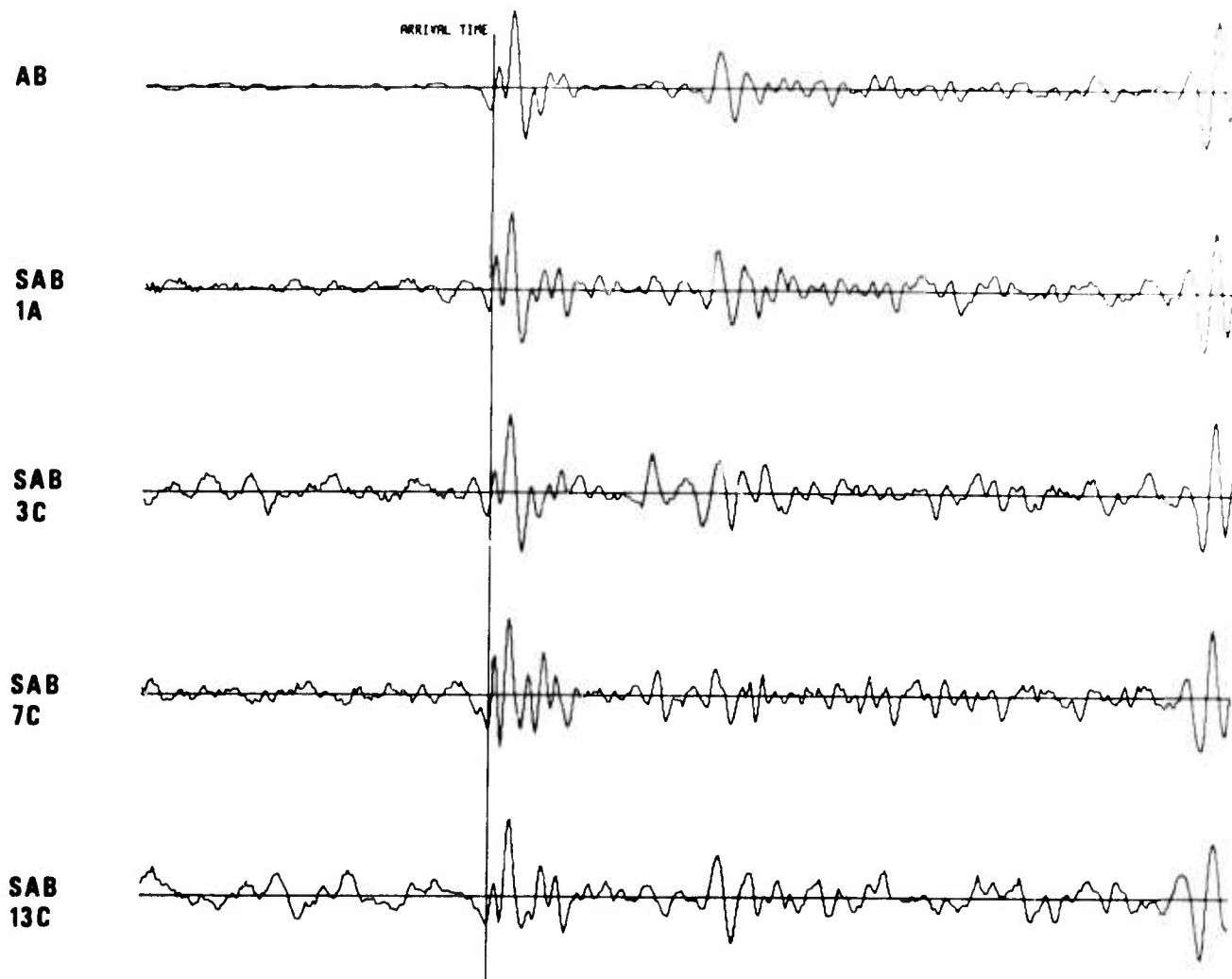
NORSAK EVENT FILE

1975 JUN 17

EPX NO. 49090 ARR. 5.12.1.4 18.1N 65.7W 4.5MB 33KM

DIST = 67.8 AZI = 267.4 AMP = 4.3 PER = 0.8 UMETH 2

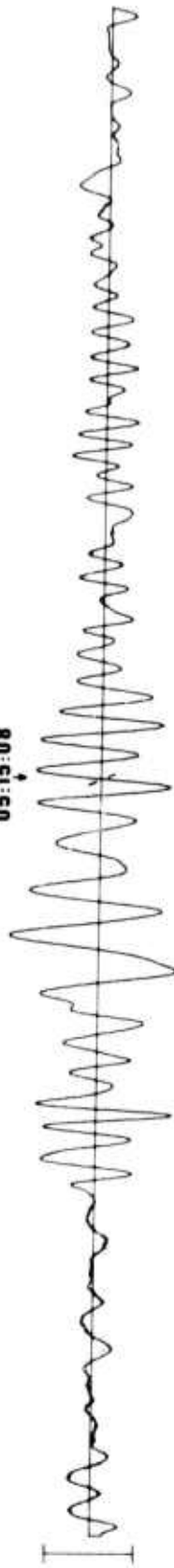
—= 5 SECONDS



CPSO 17 JUN 75

05:15:08

LPZ
339.03 Mμ



LPN
UNKNOWN



LPE
336.60 Mμ



TIME



05:15:00

INVALID CALIBRATION

RK-ON 17 JUN 75

05:24:24

LPZ
452.12 M μ



LPR
1486.95 M μ



LPT
1999.06 M μ



TIME



2 MIN

05:25:00

WH2YK 17 JUN 75

LPZ
201.60 MHz

05:39:40



LPR
107.21 MHz



LPT
128.65 MHz



TIME



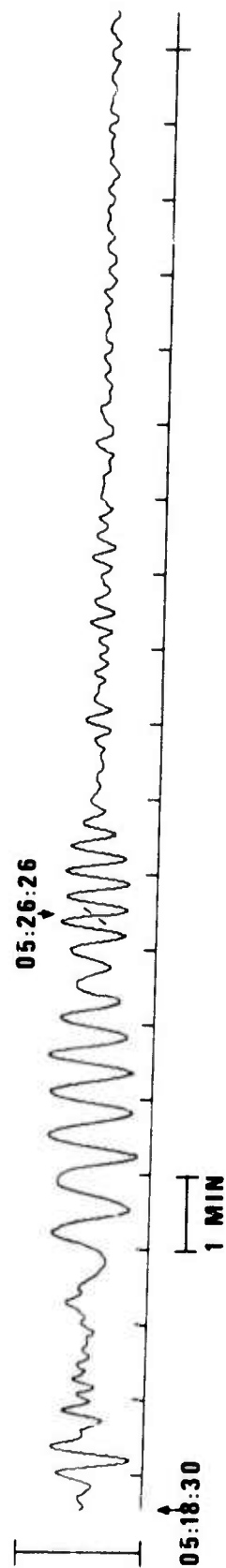
2 MIN

05:40:00

ARRAY LONG PERIOD VERTICAL BEAMS 17 JUN 75

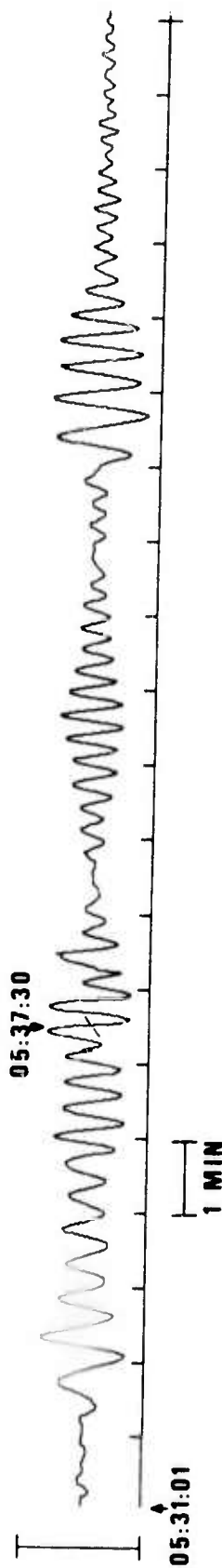
LASA

LP VERTICAL
602.65 Mμ



NORSAR

LP VERTICAL
182.73 Mμ



ALPA

LP VERTICAL
178.53 Mμ

